

**IN THE CLAIMS**

The following is a complete listing of revised claims with a status identifier in parenthesis.

**LISTING OF CLAIMS**

1. (Previously Presented) A wireless receiver comprising:  
a receiver for receiving a wireless signal comprising pilot symbols and data symbols; and  
a demodulator for generating a log-likelihood ratio as a function of a scale factor;  
wherein the scale factor is stored in a look-up table such that an index into the look-up table used in retrieving the scale factor is a function of a noise variance of the received pilot symbols of the wireless signal.
2. (Cancelled)
3. (Previously Presented) The wireless receiver of claim 1 wherein the scale factor is determined independently of relative strengths and number of multipaths in the received wireless signal.
4. (Previously Presented) The wireless receiver of claim 1 further comprising a processor for determining the scale factor as a function of the noise variance of the received pilot symbols of the received wireless signal.

5. (Original) The wireless receiver of claim 4 wherein the scale factor is determined independently of relative strengths and number of multipaths in the received wireless signal.

6. (Previously Presented) The wireless receiver of claim 1 further comprising a memory for storing the look-up table.

7. – 8. (Cancelled)

9. (Previously Presented) The wireless receiver of claim 1 wherein the receiver comprises a demultiplexer for providing a data signal, representing the data symbols, and a control signal, representing the pilot symbols.

10. (Previously Presented) The wireless receiver of claim 9 wherein the receiver comprises a control signal detector for recovering from the control signal a value for a ratio between the energy per pilot symbol to the energy per data symbol.

11. (Previously Presented) A wireless receiver comprising:  
a memory for storing a look-up table, such that an index into the look-up table for retrieving a scale factor associated with a log-likelihood ratio is a function of a noise variance of received pilot symbols of a wireless signal which comprises the pilot symbols and data symbols; and  
a decoder, responsive to a signal modified by the retrieved scale factor, for decoding a received form of the wireless signal.

12. – 14. (Cancelled)

15. (Previously Presented) The wireless receiver of claim 11 wherein the scale factor is determined independently of relative strengths and number of multipaths in the received form of the wireless signal.

16. (Previously Presented) The wireless receiver of claim 11 further comprising a control signal detector for recovering from the received form of the wireless signal a value for a ratio between the energy per pilot symbol to the energy per data symbol.

17. (Previously Presented) A wireless receiver comprising:  
a memory for storing a look-up table, wherein one column of the look-up table comprises values that are a function of a noise variance of received pilot symbols of a wireless signal which comprises the pilot symbols and data symbols, and a second column of the look-up table provides associated values of a scale factor; and

a demodulator, responsive to retrieved values of the scale factor, for demodulating a received form of the wireless signal and generating a log-likelihood ratio as a function of the scale factor.

18. – 20. (Cancelled)

21. (Previously Presented) The wireless receiver of claim 17 wherein the scale factor values of the look-up table are determined independently of relative strengths and number of multipaths in the received form of the wireless signal.

22. (Cancelled)

23. (Previously Presented) The wireless receiver of claim 20 further comprising a control signal detector for recovering from the received form of the wireless signal a value for a ratio between the energy per pilot symbol to the energy per data symbol for use by the memory.

24. (Previously Presented) A wireless receiver comprising:  
a demodulator for demodulating a received wireless signal comprising pilot symbols and data symbols; and  
a processor for determining a scale factor using a look-up table such that an index into the look up table is a function of a noise variance of the received pilot symbols of the wireless signal, and for providing the determined scale factor to the demodulator for use in demodulating a received form of the wireless signal; and wherein the demodulator generates a log-likelihood ratio as a function of the scale factor.

25. – 26. (Cancelled)

27. (Original) The wireless receiver of claim 24 wherein the scale factor is determined independently of relative strengths and number of multipaths in the received wireless signal.

28. (Previously Presented) The wireless receiver of claim 24 wherein the index is a function of a noise variance in the received data symbols of the received form of the wireless signal, and the noise variance in the received pilot symbols of the received form of the wireless signal.

29. (Cancelled)

30. (Previously Presented) The wireless receiver of claim 4 wherein the processor further determines the scale factor as a function of the noise variance of the received pilot symbols and a noise variance of the received data symbols of the received wireless signal.

31. (Previously Presented) The wireless receiver of claim 1 wherein the index into the look-up table used in retrieving the scale factor is a function of the noise variance of the received pilot symbols and a noise variance of the received data symbols of the received wireless signal.

32. (Previously Presented) The wireless receiver of claim 11 wherein the index for retrieving the scale factor is a function of the noise variance of the received pilot symbols and a noise variance of the received data symbols.

33. (Previously Presented) The wireless receiver of claim 17 wherein the one column of the look-up table further comprises values that are a function of the noise variance of the received pilot symbols and a noise variance of the received data symbols.